

Ultra-fast Rectifier
MUR2020
FEATURES

- 200V blocking voltage
- Very short recovery time
- Soft recovery behaviour
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

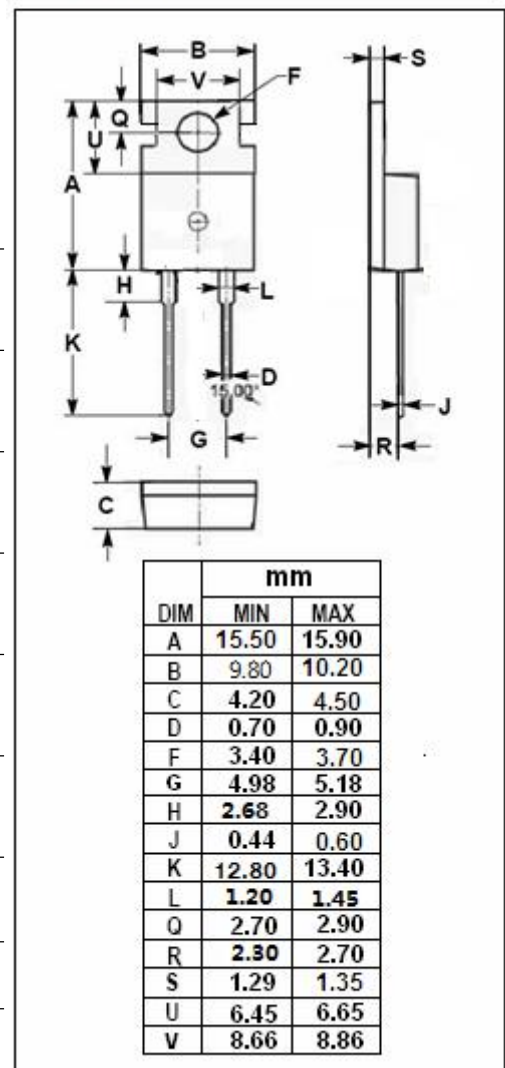
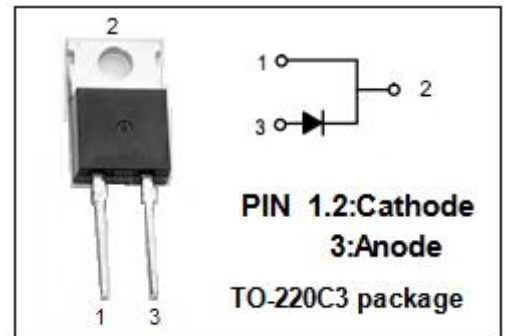
- Power Supply-Output Rectification
- Power Management
- Instrumentation

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current	20	A
I _{FSM}	Nonrepetitive Peak Surge Current@45°C (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.0	°C/W



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ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{F^*}	Maximum Instantaneous Forward Voltage	$I_F=20\text{A}; T_j=25^{\circ}\text{C}$	1.0	V
I_{R^*}	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}$ $V_R=V_{RWM}; T_j=125^{\circ}\text{C}$	10 250	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	35	ns

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